

REMARKS

A. Introduction

In the April 23, 2003 Office Action, claims 12-22 are noted as pending and are rejected. In this Response, claims 12, 16, 18 and 19 are amended, claims 20-22 are canceled, and remarks are provided.

Applicants request entry of this Rule 116 Response because: (a) a number of the rejected claims are canceled; (b) it is believed the remaining claims as amended herein to distinguish over the prior art and otherwise comply with 35 U.S.C. Section 112; (c) the amendments were not earlier made because the applicant believed in good faith that the cited prior art did not disclose the present invention as recited by these claims; and (d) the amendments should not entail any further search by the Examiner.

B. New Matter Rejection

The Action indicates that the phrases "substantially rigid" in claim 12 and "an on/off controller" for each fan in claim 22 constitute new matter. Without acquiescing in the rejection, it is noted that the phrase "substantially rigid" has been deleted from claim 12, and claim 22 has been canceled.

In light of these amendments, it is believed that the new matter rejections have been overcome.

C. Objection to the Specification/Drawings

The specification and drawings are objected to on the ground that they fail to show various features recited in claims 20-22. These claims are canceled herein so this rejection is rendered moot.

D. Objection to/Rejection of Claims

In numbered paragraphs 10-14, the Examiner raises various objections/rejections to claims 12-22.

The matters raised in numbered paragraph 10 have been attended to in the amended claims 12-19 herein.

As for numbered paragraph 12, as noted above the "rigid walls" of claim 12 has been deleted, and claim 22, which recited the on/off controller has been canceled.

The Examiner also questions the meaning of the streams of fresh air and stale air recited in claim 12. Claim 12 has been amended to clarify that the streams circulate in the respective fluid passages within the heat exchange unit.

In regard to claim 16, the generatrices are described as being parallel to each other to better define their relationship.

E. Rejection of Claims 12-14 and 16-18

These claims are rejected as being "anticipated" under 35 U.S.C. § 102 by Oberschmid, as the Examiner believes it discloses a flexible foil heat exchanger having a cross-section of undulating shape for two fluid flows.

According to the present invention, the air circulator controls the cross sections of the fluid passages. That is, when the air circulator (e.g., the entry fan (38) and the extraction fans (44 and 46)) is operating, it introduces both the stream of fresh air and the stream of stale air into the respective fluid passages under pressure to maintain said passages at spaced intervals. Compare Figs. 6 and 7 with Figs. 10 and 11 of the present application.

In this regard, independent claim 12 has been amended to emphasize that the air circulator introduces the streams of fresh and stale air, both under pressure, in the two fluid passages, respectively, which open fluid passages, thereby providing for the circulation of said stream of fresh air and said stream of stale air in the heat exchanger. Support for this amendment is found, e.g., in the following passages:

Furthermore...the undulations of the foil can become deformed in response to the respective pressures of the stream of fresh air AN and the stream of stale air AV, to allow controlled opening or closing of one or the other of the fluid passages 34 and 36 as a function of the mode operation required. (page 6, lines 26-28)

From the fact that the fans are operating, the fluid passages 34 and 36 are both under pressure and the folds of the undulations of the foil 30 defined on one side and the other open channels providing for the circulation of the two fluids respectively... (page 8, line 28 to page 9, line 2).

See also, page 2, lines 10-14 and 23-26, page 8, lines 21-30 and page 9, lines 1-3 and 21-29.

In contrast, the cited German reference has walls which are deformed by using a string. For example, referring particularly to Fig. 4c, the deformations of the channels are geometrically limited by strings 5 and 31 to shorten such distances between the fluid passages.

More particularly, with reference to Fig. 2b, it appears that the channel for fresh air is under overpressure because of the positioning of the fan (10), the channel for the stale air is under reduced pressure because of the positioning of the extraction fan (11). This means that the extraction channel is flattened. Consequently, to allow circulation of the extracted air, it is necessary to limit the deformation of the channel for the fresh

air by the strings (5).

The present invention avoids the need to limit deformation through the use of strings or the like to maintain distances between the fluid passages, by having both streams of fresh and stale air introduced into the respective fluid passages under pressure. That is, as recited in claim 12 herein, the air circulator introduces the stream of fresh air and the stream of stale air, both under pressure, in the two fluid passages, respectively, defining open channels to provide for the circulation of said streams through the heat exchange unit.

D. Rejection of Claims 12, 13, 16 and 17

These claims are rejected as being anticipated by Harrison, already of record.

Harrison appears to fix the fluid channels also. See Col. 3, lines 30-36 and 55-57, which discusses the tape or wrapper 5, and closing the ends of the fluid passages with wax or castable potting compound, and spacing the folds of paper with sand. Clearly this structure does not allow for defining the fluid passages based on respective streams by introducing them under pressure in respective fluid passages.

E. Rejection of Claims 19-22

These claims are rejected as being made obvious based Oberschmid.

Claims 20-22 have been canceled.

In regard to claim 19, the above comments regarding independent claim 12, from which claim 19 ultimately depends, are expressly incorporated herein. In addition, the air circulator (fans as recited in claim 19) of the present invention is responsible for introducing the streams of air under pressure, and the placement of the fans as recited in claim 19 assists in the introduction of the streams of air under pressure. As noted above, the German Reference's deformable walls are pre-limited using string, and one of ordinary skill would not consider the placement to the fans to be important, since air

pressure does not play the role in the German Reference that it does in the present invention recited by claim 19.

III. CONCLUSION

In light of the above amendments and remarks, it is respectfully submitted that claims 12-19 are in condition for allowance.

If there are any additional fees associated with this Response, please charge same to our Deposit Account No. 19-3935.

Finally, if there are any formal matters remaining after this Response, the undersigned would appreciate a telephone conference with the Examiner to attend to these matters.

Respectfully submitted,

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8/20/03

By: _____

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